

NEW RECORDS OF AUSTRALIAN HEMEROBIIDAE (NEUROPTERA)

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Abstract

New distribution records for species of the economically important brown lacewings (Neuroptera: Hemerobiidae) are presented.

Introduction

Identification of material in the Australian Museum collections has revealed the presence of specimens of brown lacewings from localities which have not been recorded. Despite the economic importance of brown lacewings as predators of homopterous and other pest arthropods there has been relatively little published on the family in Australia. It is hoped that this note might encourage others to collect these important insects and add to knowledge of their distribution and biology.

New records

Carobius curvatus New

MATERIAL EXAMINED. South Australia: 3 males, 1 female, 5 km N Yunta, 25.iv.1983, G.A. Holloway. Species known previously only from the type locality, 13 km NW by N of Hawker, South Australia, 100 km to the NW.

Carobius pectinatus New

MATERIAL EXAMINED. Northern Territory: 1 male, Palm Valley, MacDonnell Ranges, 21.v.1983, G.A. Holloway. 2 males, 1 female, King's Canyon, George Gill Range, 25.v.1983, G.A. Holloway. These localities are about 80 km and 125 km SW of Alice Springs respectively. The species was previously known from two localities in the Northern Territory, namely 39 km E of Alice Springs and 8 km N of Kulgera.

Carobius pulchellus Banks

MATERIAL EXAMINED. New South Wales: 1 female, Narrabeen, 10.x.1983, G. Hangay. The only previously recorded New South Wales locality is Campbelltown, about 60 km to the SW. The species is otherwise recorded from Queensland.

Carobius spinosus New

MATERIAL EXAMINED. New South Wales: 13 males, 18 females, 55 km E Tibooburra, Pindera Downs, 10-12.viii.1983, G.A. Holloway. Species previously known from 28 km E by S of Southern Cross, 29 km SE by E of Coolgardie and from Madura Pass, all in Western Australia.

Drepanacra binocula (Newman)

MATERIAL EXAMINED. New (1988) does not list localities for the very large number of specimens he examined. This is a very common and widespread species of hemerobiid which has been recorded from all States except the Northern Territory. I have examined material from the following localities. Tasmania: King River (near Queenstown) and Nietta. Western Australia: Bunbury. New South Wales: Barren Grounds Nature Reserve, Mt Tomah, Mt Wilson, Wattamolla and Kurrajong.

Megalomina acuminata Banks

MATERIAL EXAMINED. New South Wales: 1 female, Turramurra, Sydney, 29.ix.1966. A.S. Smithers. This large species was previously known only from Bundaberg, Queensland, and Canberra.

Micromus tasmaniae (Walker)

MATERIAL EXAMINED. This is probably the commonest species of hemerobiid in Australia and has been recorded as being "throughout Australia" by New (1988, p.366) but details of localities have not been recorded. The present material includes specimens from the following localities. Tasmania: Collinsvale, Forth River, Hobart, Mt Wellington, Leven Canyon. Western Australia: Cape le Grand, 1 km W Dalyup River, 20 km W Pemberton. New South Wales: Narrabeen, Bago State Forest, Northwood, Polblue (Barrington Tops), Gloucester Tops, Mooney Mooney Creek, Mt Tomah, Yalogrin State Forest, Kurrajong, 2 km E Mt Wilson, 115 km SE Tibooburra, Sandy Hollow, Merriwa, Werrikimbe National Park, Jenolan, Landsdowne (near Taree), Mootwingee National Park, Shoalhaven River, 30 km W Nowra, 10 km N Roto, Mt Keira, Mt Kaputar. Queensland: Bunya Mts. South Australia: Port Augusta.

Psychobiella sordida Banks

MATERIAL EXAMINED. New South Wales: 4 females, Jenolan, 14-20.i.1985, G. Hangay. A widespread species in eastern Australia, occurring from southern Queensland (Bundaberg) to Tasmania.

Notherobius nothofagi New

MATERIAL EXAMINED. Tasmania: 1 male, 2 females, Cradle Mt National Park, 4.ii.1987, C.N. and A.S. Smithers. 1 female, Wedge River, 7.ii.1987, C.N. and A.S. Smithers. Previously known from a few Tasmanian localities only and the type locality, Lake Mountain, in Victoria.

Zachobiella submarginata Esben-Petersen

MATERIAL EXAMINED. New South Wales: 1 female, 4 km S Murrurundi, 1.iv.1983, A.S. Smithers. 3 females, Upper Allyn, 21.ii.1984, C.N. and A.S. Smithers. This species occurs in eastern Australia from Queensland to Victoria.

Psectra tillyardi (Kimmins)

MATERIAL EXAMINED. New South Wales: 1 female, Lorien Wildlife Refuge, 3 km N Landsdowne, near Taree, 11-25.i.1981, G. Williams. 1 male, same locality, 6.iv.1987, D.K. McAlpine, B. Day, R. de Keyzer. 1 male, Mooney Mooney Creek, near Gosford, 13.xii.1990, D.K. McAlpine. Queensland: 1 female, The Boulders, near Babinda, 21.i.1991, D.K. McAlpine and B. Day.

DISCUSSION. The genitalia of the males from Lorien Wildlife Refuge and Mooney Mooney Creek correspond well with the description and illustrations given by New (1988, figs. 65-70). In the Lorien specimen the forewing has the dark oblique colour band along the gradates much more distinct than in New's fig. 63 and approaching that of *Psectra obliqua* (Banks) (New, loc. cit. figs. 50, 54). In the Mooney Mooney Creek male there is a mere suggestion of such a band but the rest of the wing is much more strongly mottled. New's females from Lorien and near Babinda correspond with New's illustration for *Ps. obliqua*. There is considerable variation in the wing pattern in these species so that it is not a reliable guide to identification. Unfortunately, the male of *Ps. obliqua* has not yet been described and the problem of whether there is one or there are two species involved still cannot be resolved.

Psectra nakahari New

MATERIAL EXAMINED. New South Wales: 1 male, Jenolan, 15-20.i.1985, G. Hangay. Species known previously from a few localities in New South Wales, the Australian Capital Territory and Tasmania.

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Reference

NEW, T.R. 1988. A revision of the Australian Hemerobiidae (Insecta: Neuroptera). *Invertebrate Taxonomy* 2: 339-411, 327 figs.